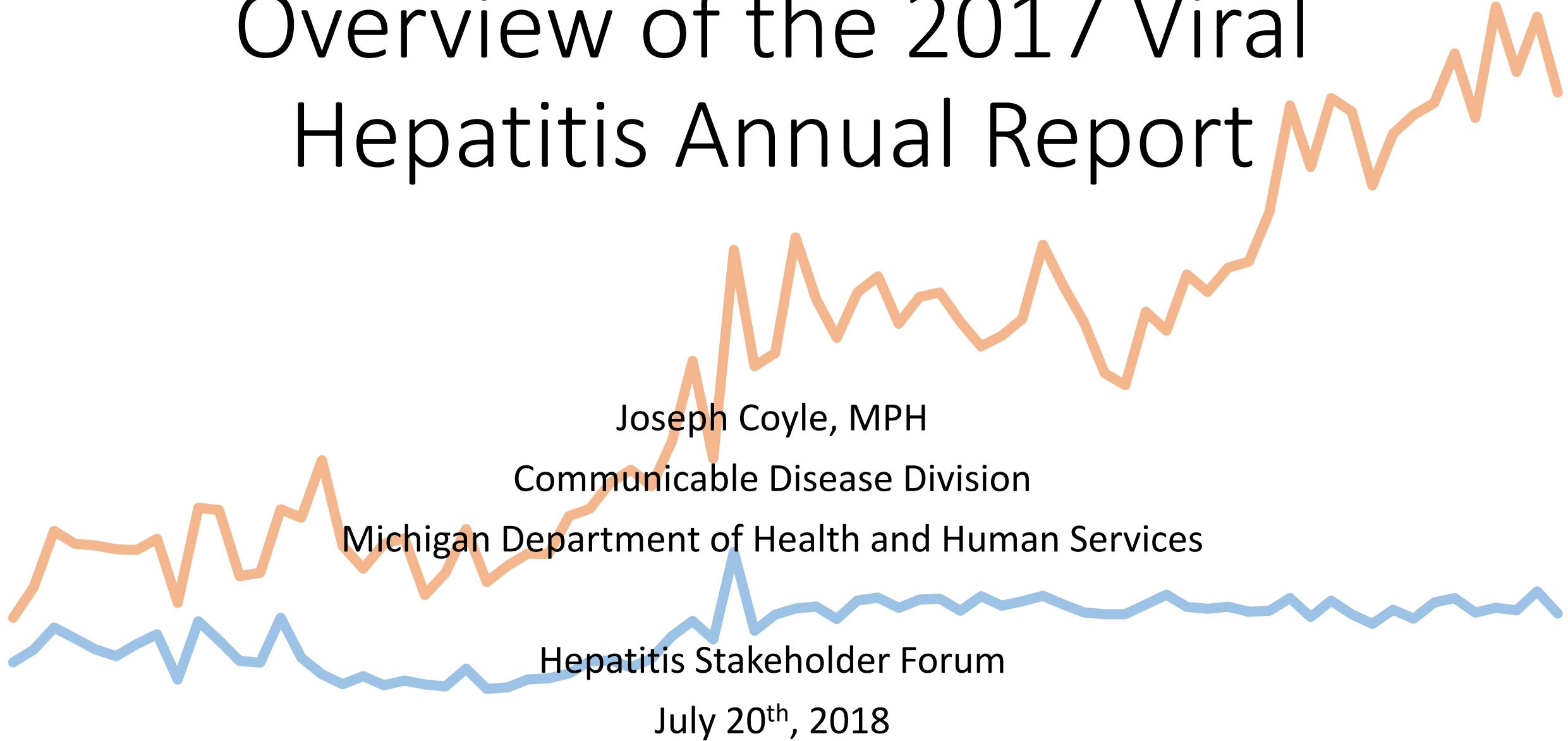
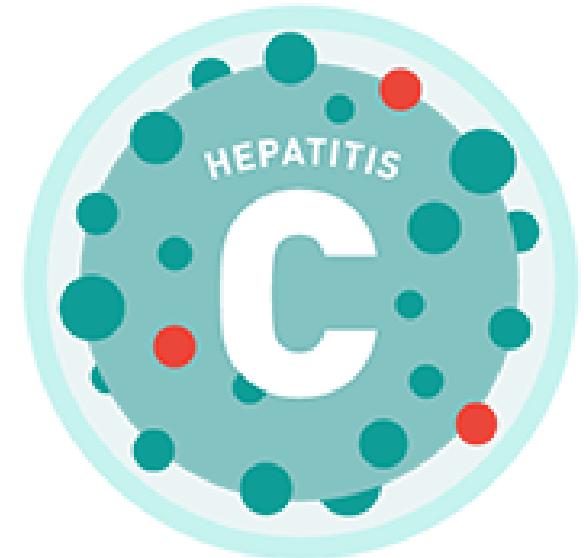


Overview of the 2017 Viral Hepatitis Annual Report



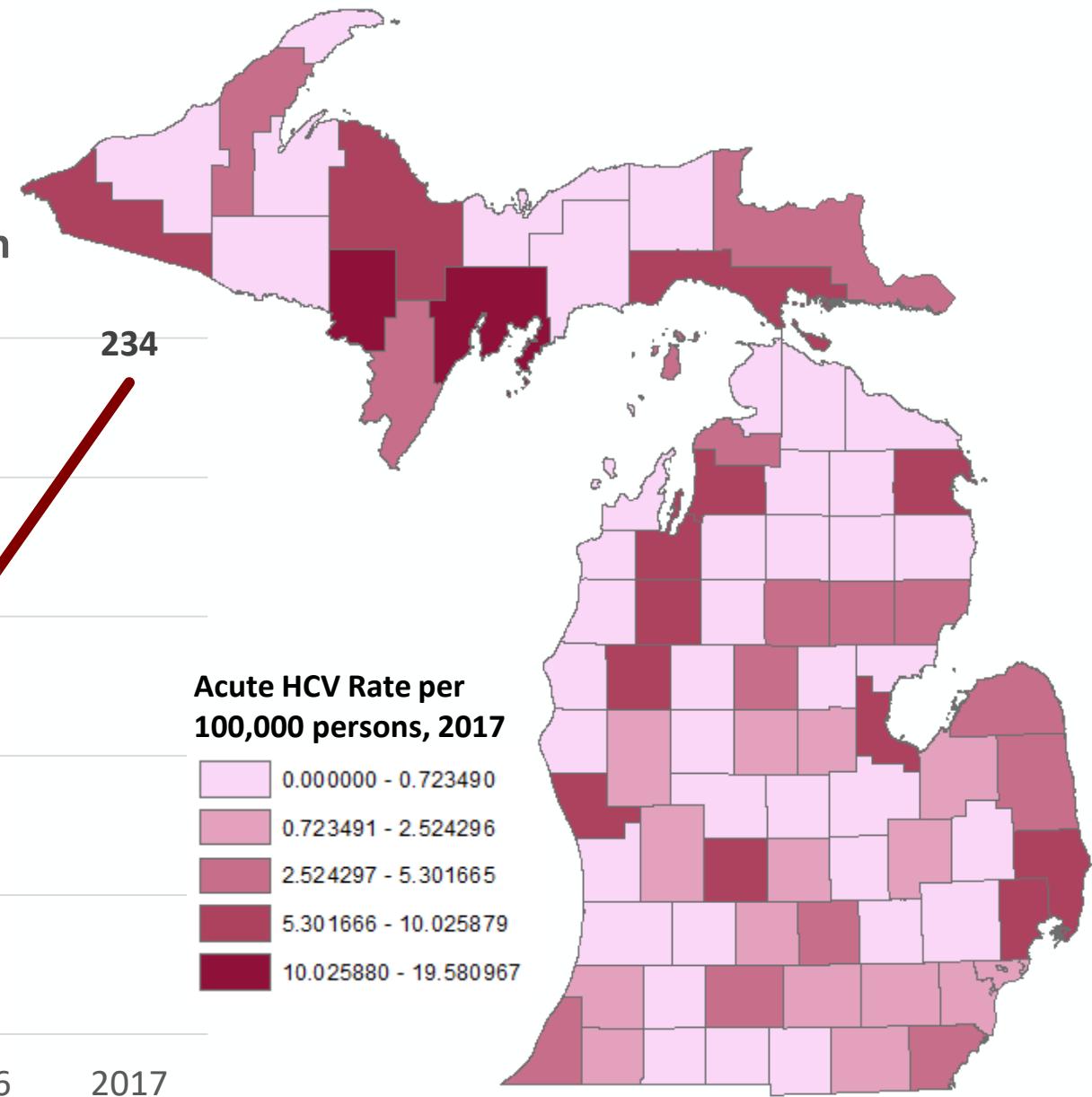
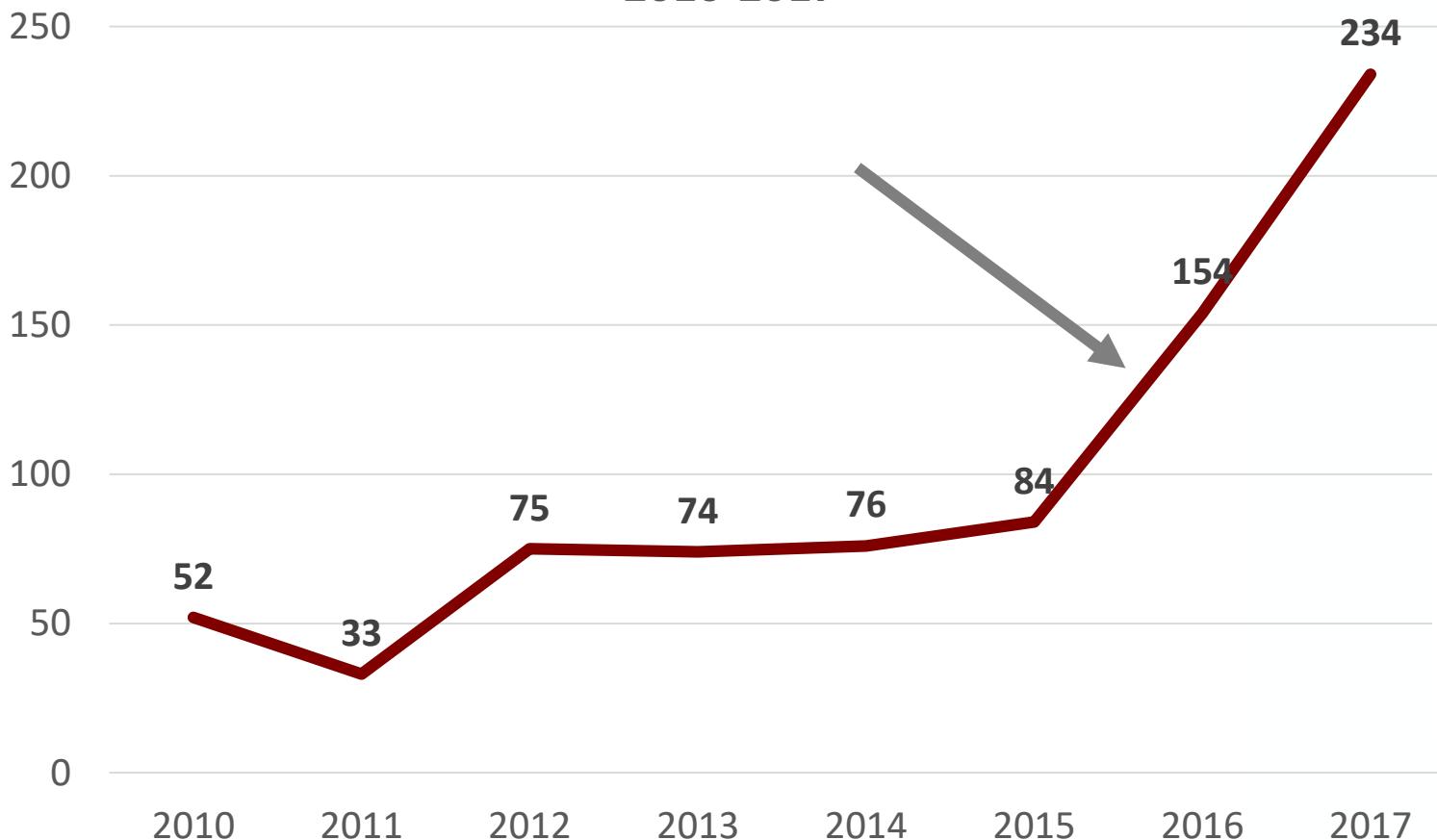
Outline

- What's the Same:
 - Acute and Chronic Hepatitis B
 - Acute and Chronic Hepatitis C
 - Hepatitis C Testing, Treatment, and Clinical Outcomes
 - Hepatitis C and the Opioid Crisis
 - Viral Hepatitis and HIV Co-infections
- What's New:
 - Hepatitis A Outbreak Information
 - Neonatal Abstinence Syndrome
- Major Themes:
 - HCV Infections Associated with the Opioid Epidemic
 - Infants and Children
 - HCV Linkage to Care and Treatment



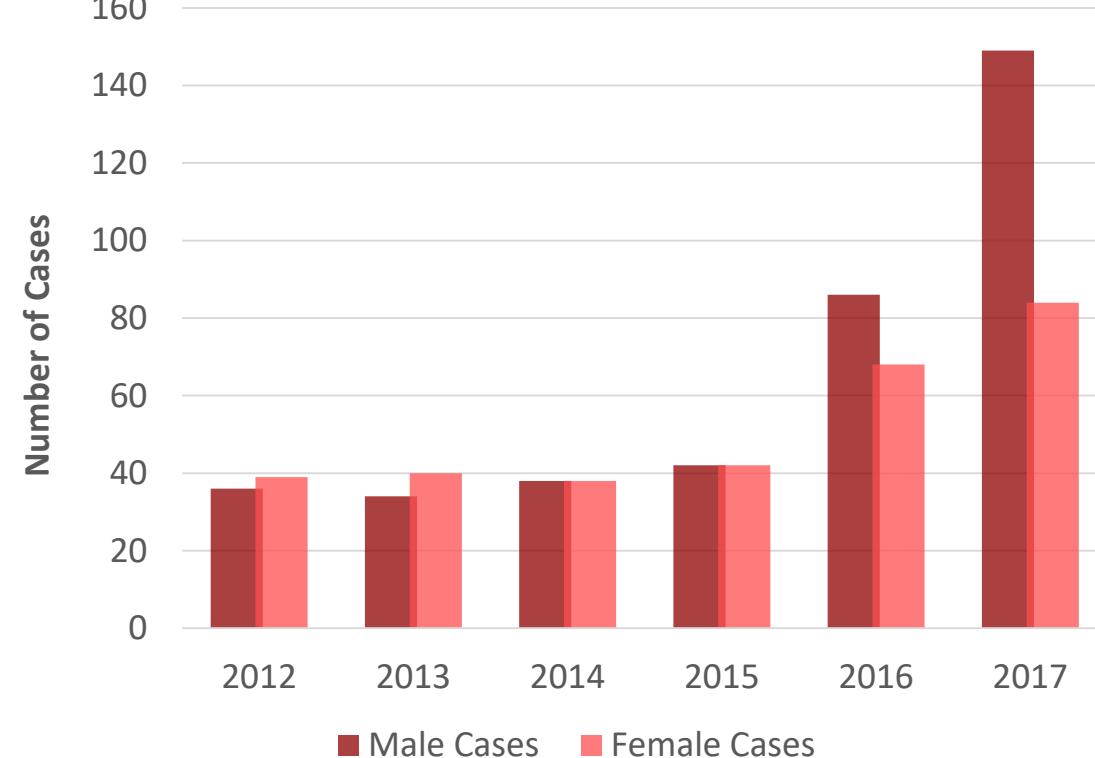
Acute Hepatitis C

Annual Number of Acute HCV Infections, Michigan
2010-2017

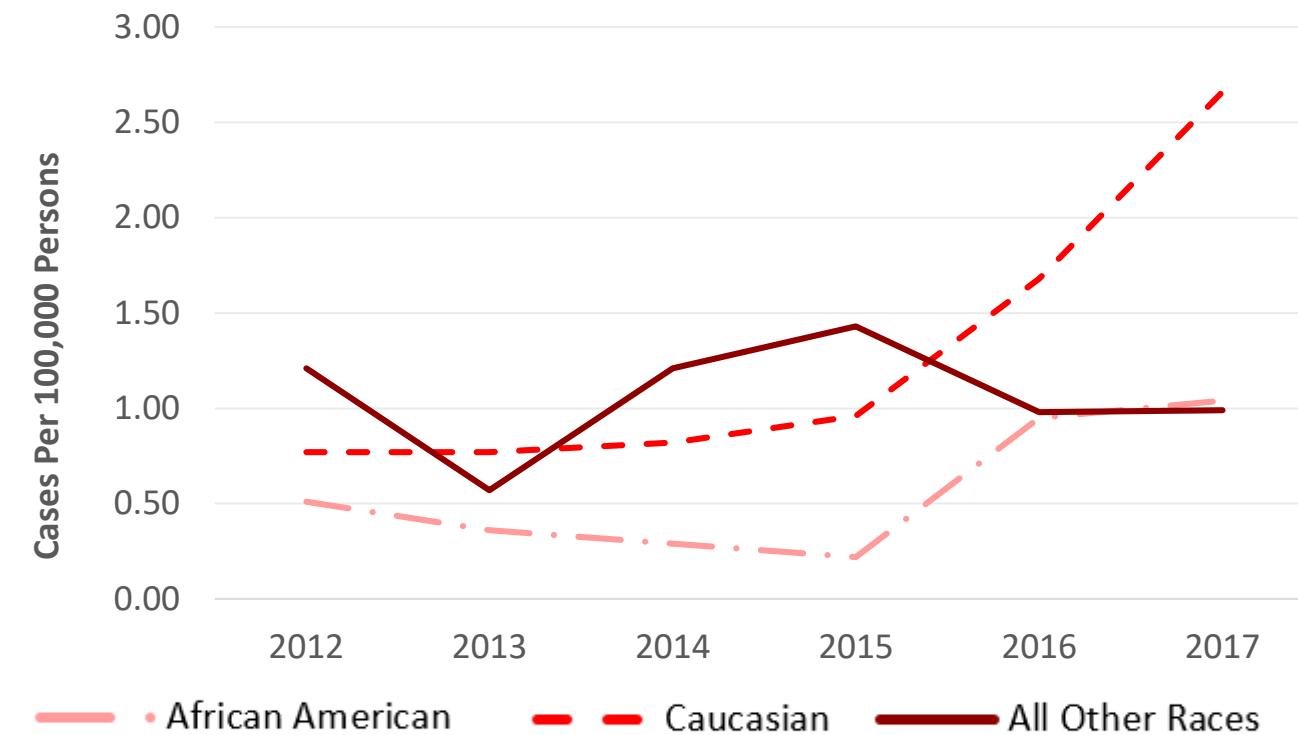


Acute Hepatitis C

Incidence of Acute Hepatitis C by Gender



Incidence of Acute Hepatitis C by Race and Ethnicity



Response of Completed Acute Hepatitis C Reports* by Risk Behavior

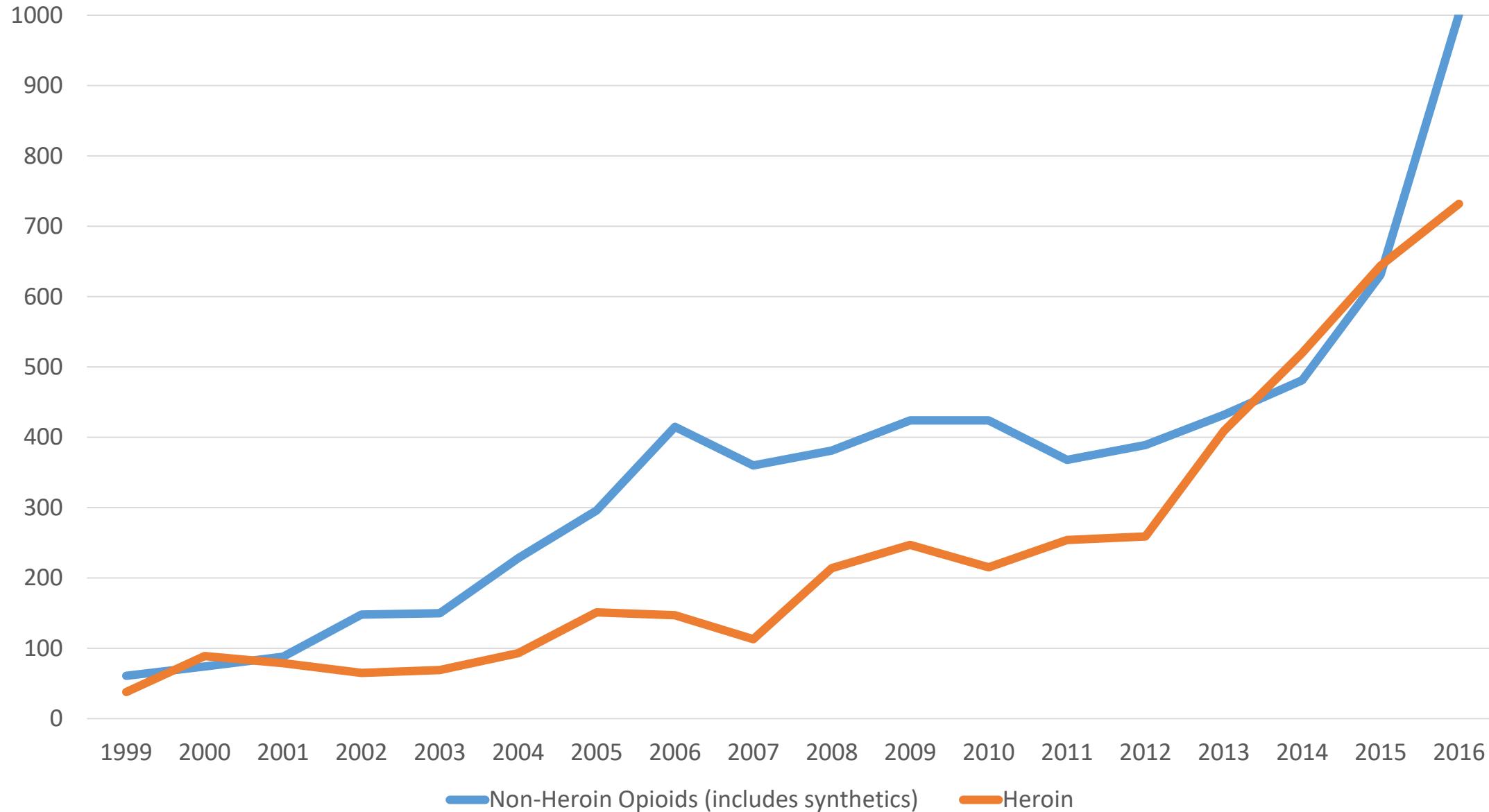
Risk Behavior	Yes*	No*	Unknown*	Yes Responses U.S. Wide 2014
Injection Drug User	65%	24%	11%	68.20%
Used Street Drugs	51%	23%	26%	-
Hemodialysis	1%	64%	36%	0.20%
Received Blood Products	3%	55%	42%	-
Received a Tattoo	21%	24%	55%	-

* Percentages calculated based upon those who completed the field; excludes missing data

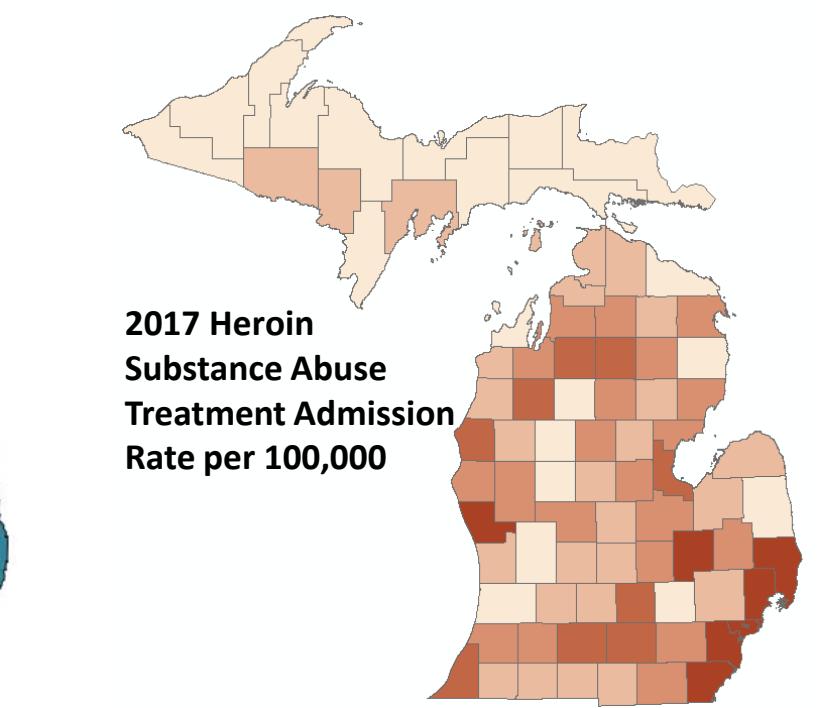
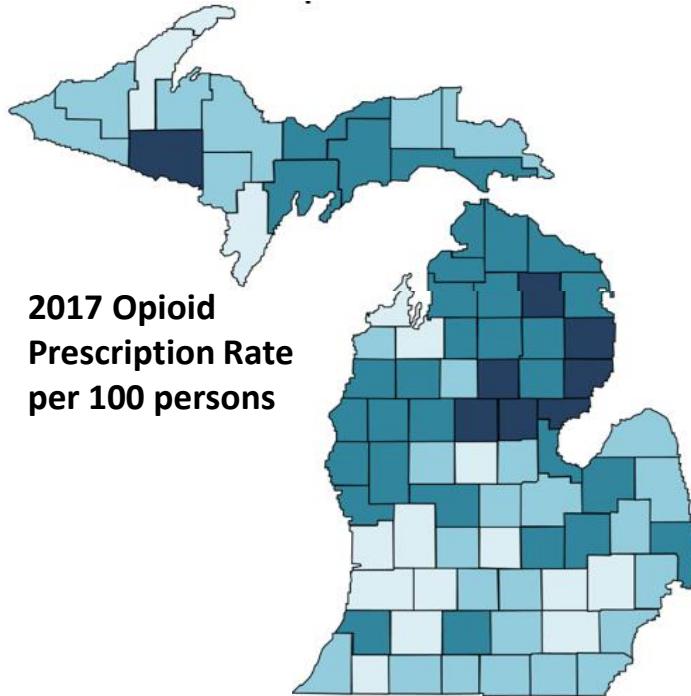
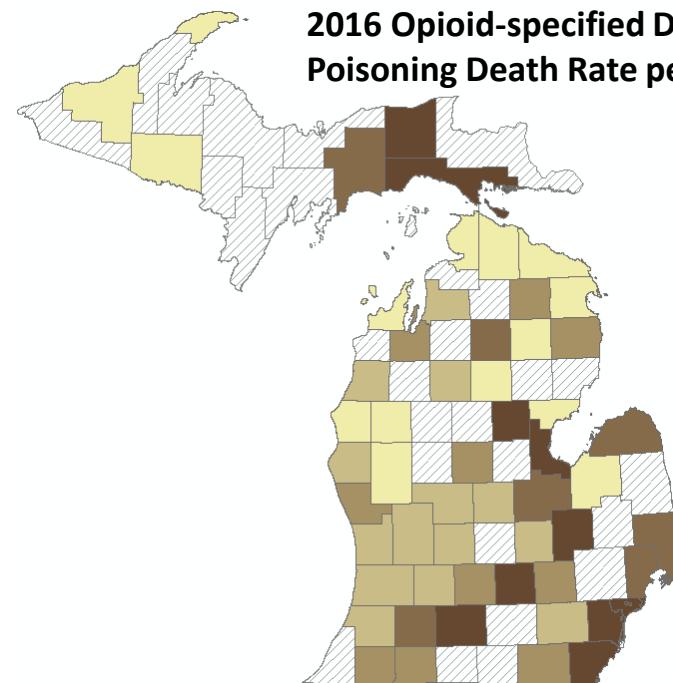
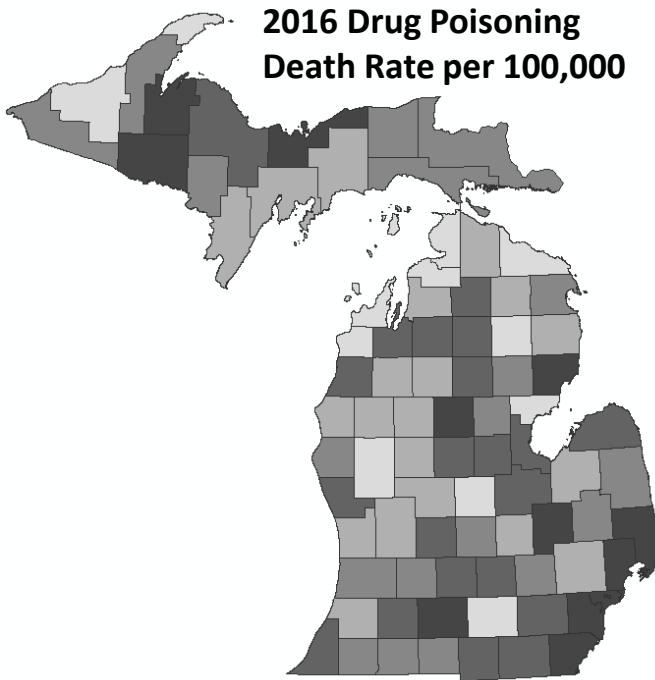
Viral Hepatitis and the Opioid Crisis



Drug Poisoning Deaths with Opioid Specified, Michigan 1999-2016

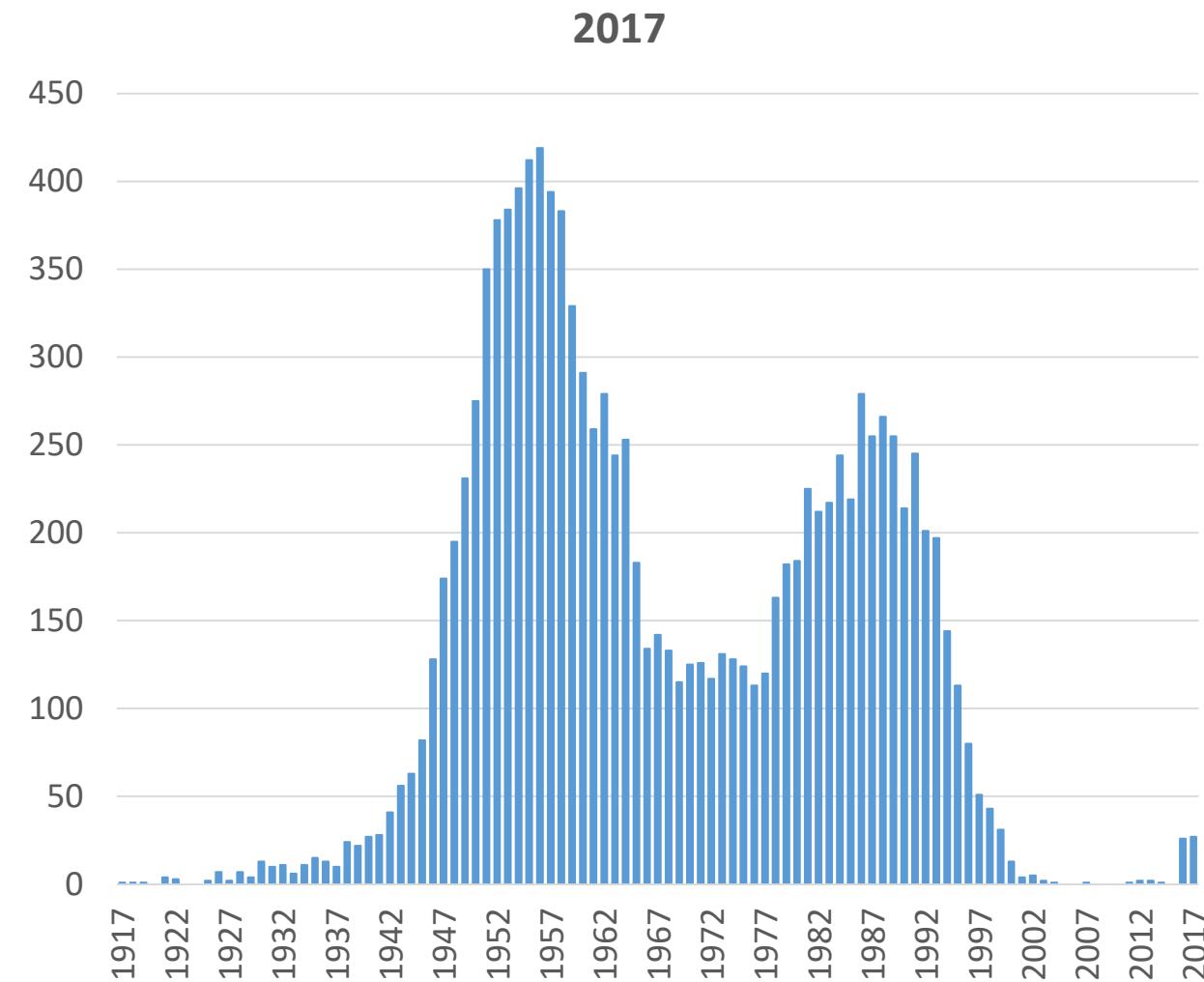
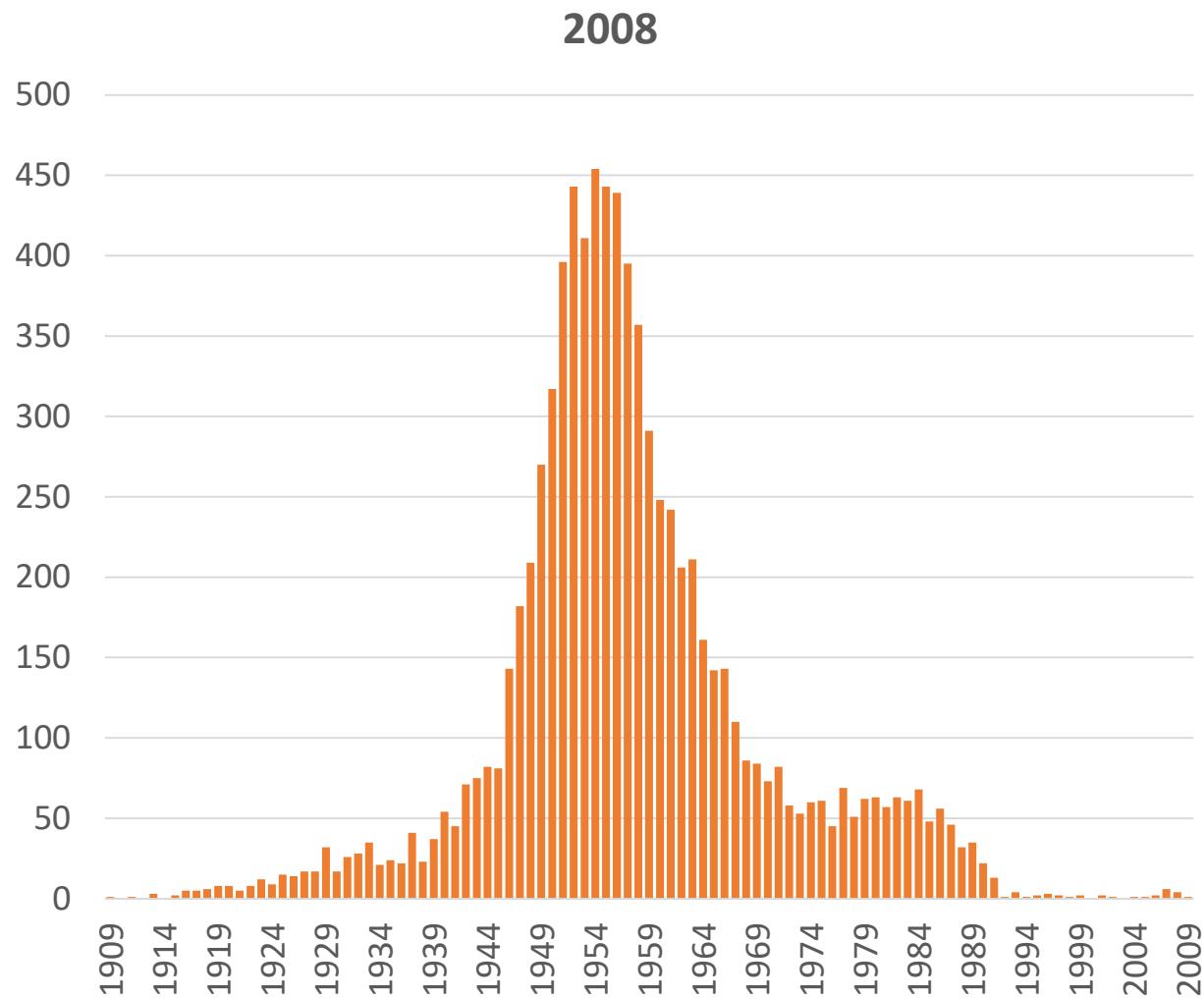


Opioid-related Maps

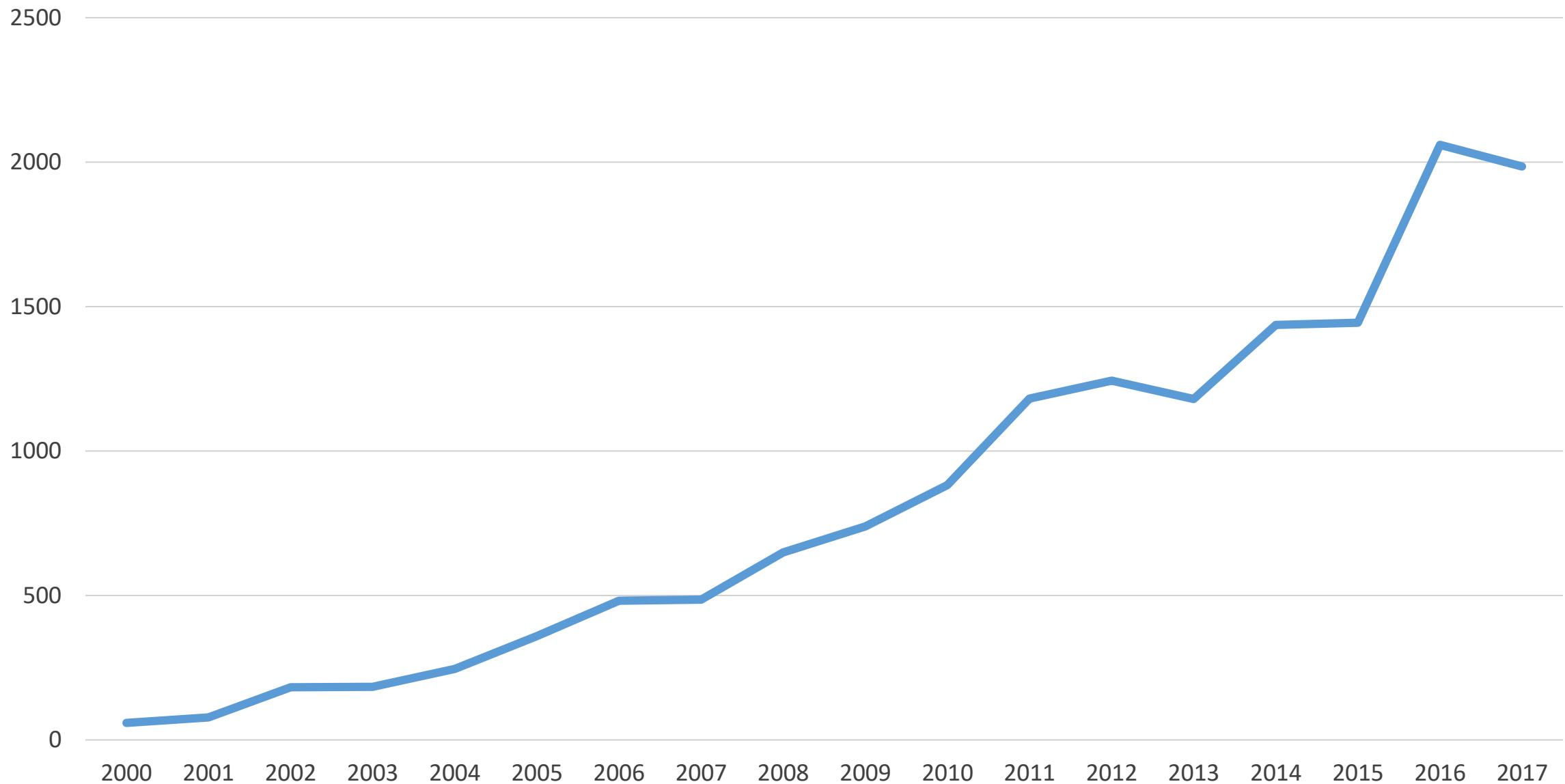


County data are suppressed if <80% of drug poisoning deaths do not have a specified drug listed

Distribution of New HCV Diagnoses by Year of Birth in Michigan 2008 vs 2017

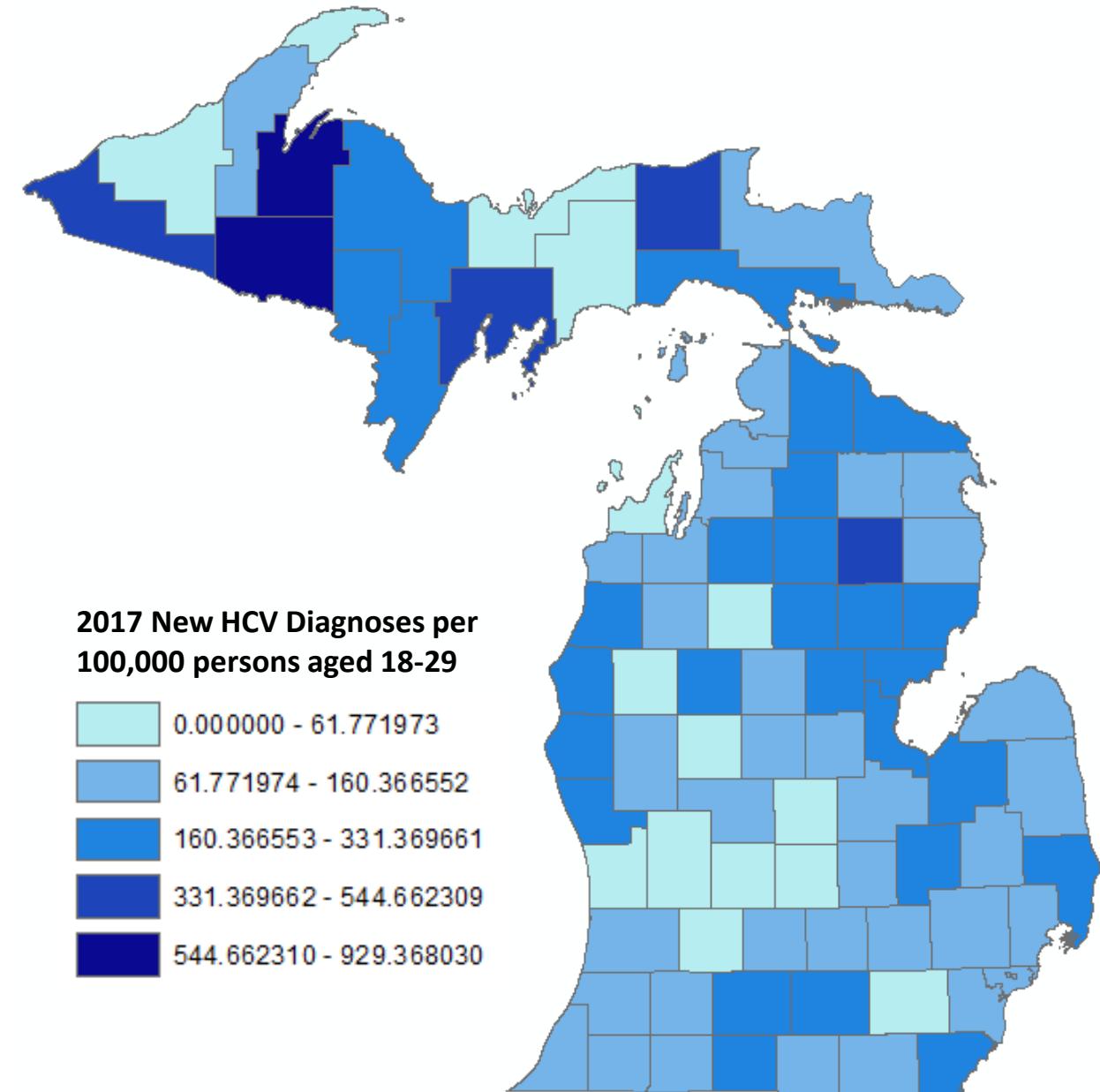


Number of New HCV Diagnoses Among 18-29 years olds, Michigan 2000-2017

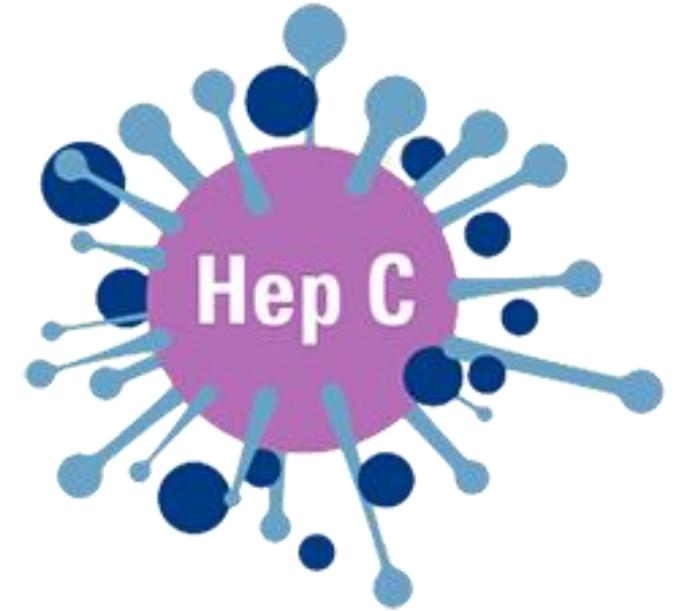


Epidemiologic Summary of 2017 Chronic HCV Cases Aged 18-29

Age (n = 2,069)		
Median	26	
Mean	25.14	
Range	18 - 29	
Sex (n = 2,062)		Rate per 100,000
Female	991 (48.1%)	124.32
Male	1,071 (51.9%)	128.26
Race (n = 1,607)		Rate per 100,000
White	1,412 (87.9%)	117.08
Black	149 (9.3%)	56.80
American Indian	36 (2.2%)	430.78
Asian	10 (0.6%)	15.23
Hispanic Ethnicity (n = 1,268)		Rate per 100,000
Hispanic or Latino	50 (3.9%)	49.62
Not Hispanic or Latino	1,218 (96.1%)	79.74
Arab Ethnicity (n = 784)		Rate per 100,000
Arab Ethnicity	1 (0.1%)	Not Available
Non-Arab	783 (99.9%)	Not Available
History of IVDU (n = 954)		
Yes	811 (85.0%)	
No	143 (15.0%)	



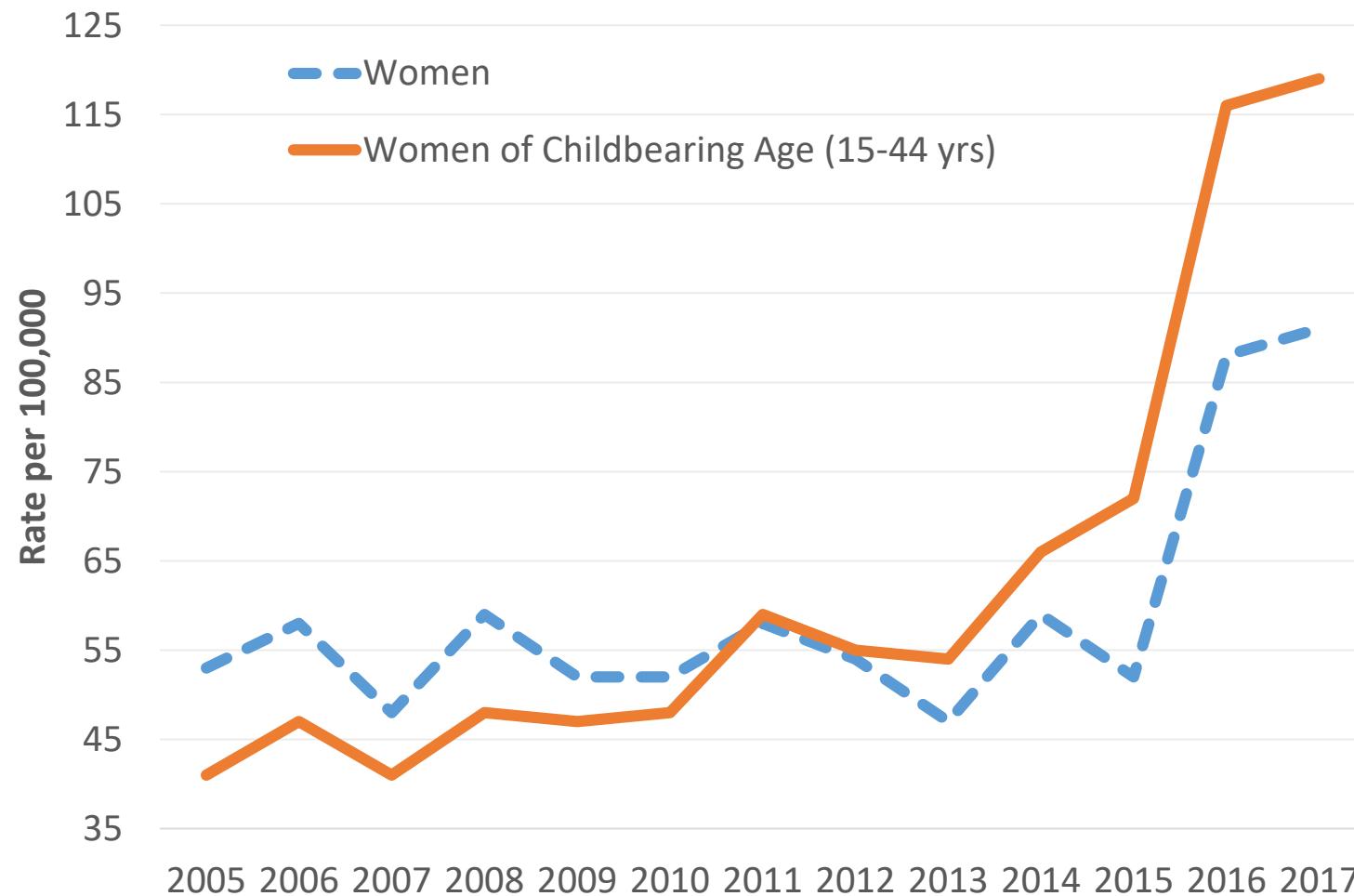
Infants and Children



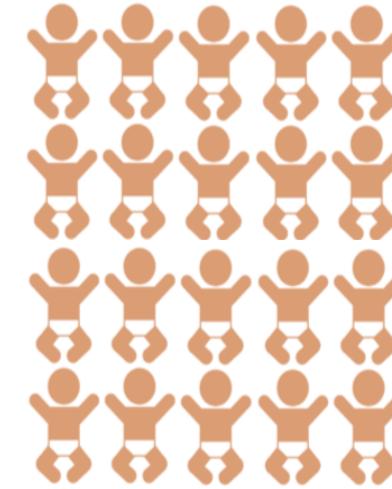
HCV Infection In Women and Children

Identified Perinatal Infections, MDSS and eHARs, 2012-2016

HCV Infection Rate per 100,000 Women



Hepatitis C:



Hepatitis B:

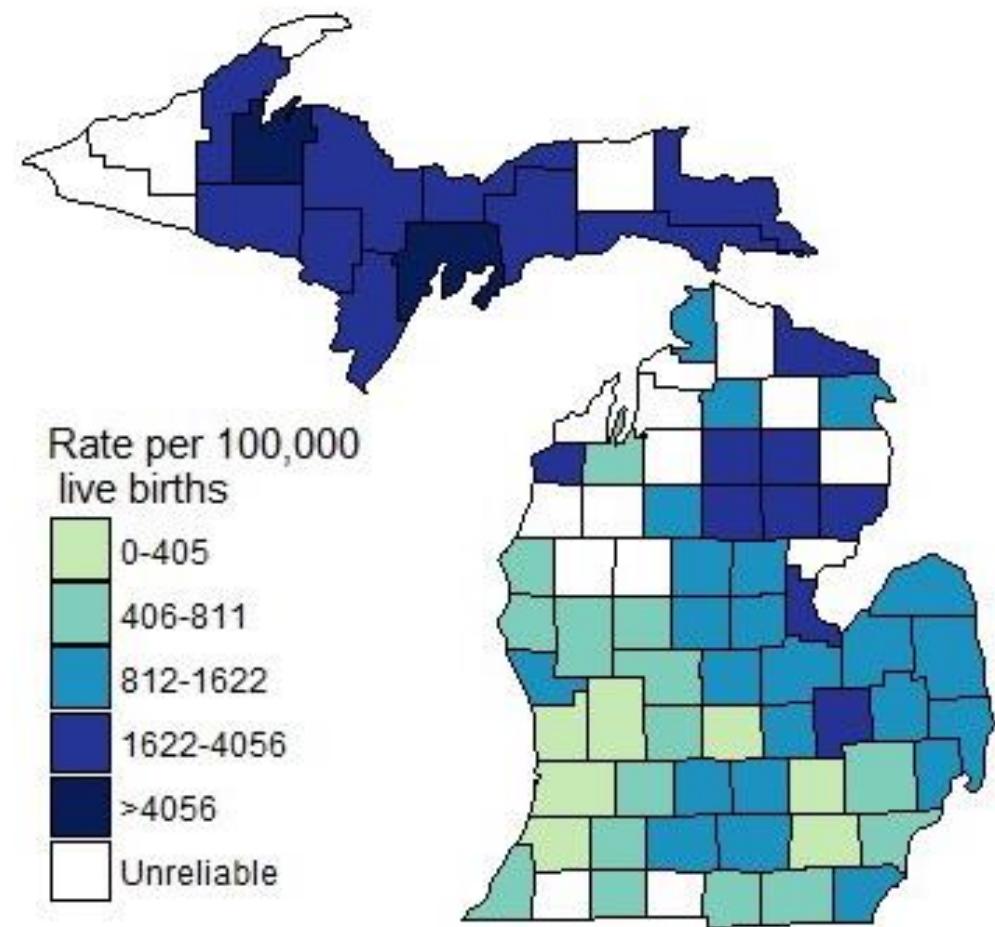
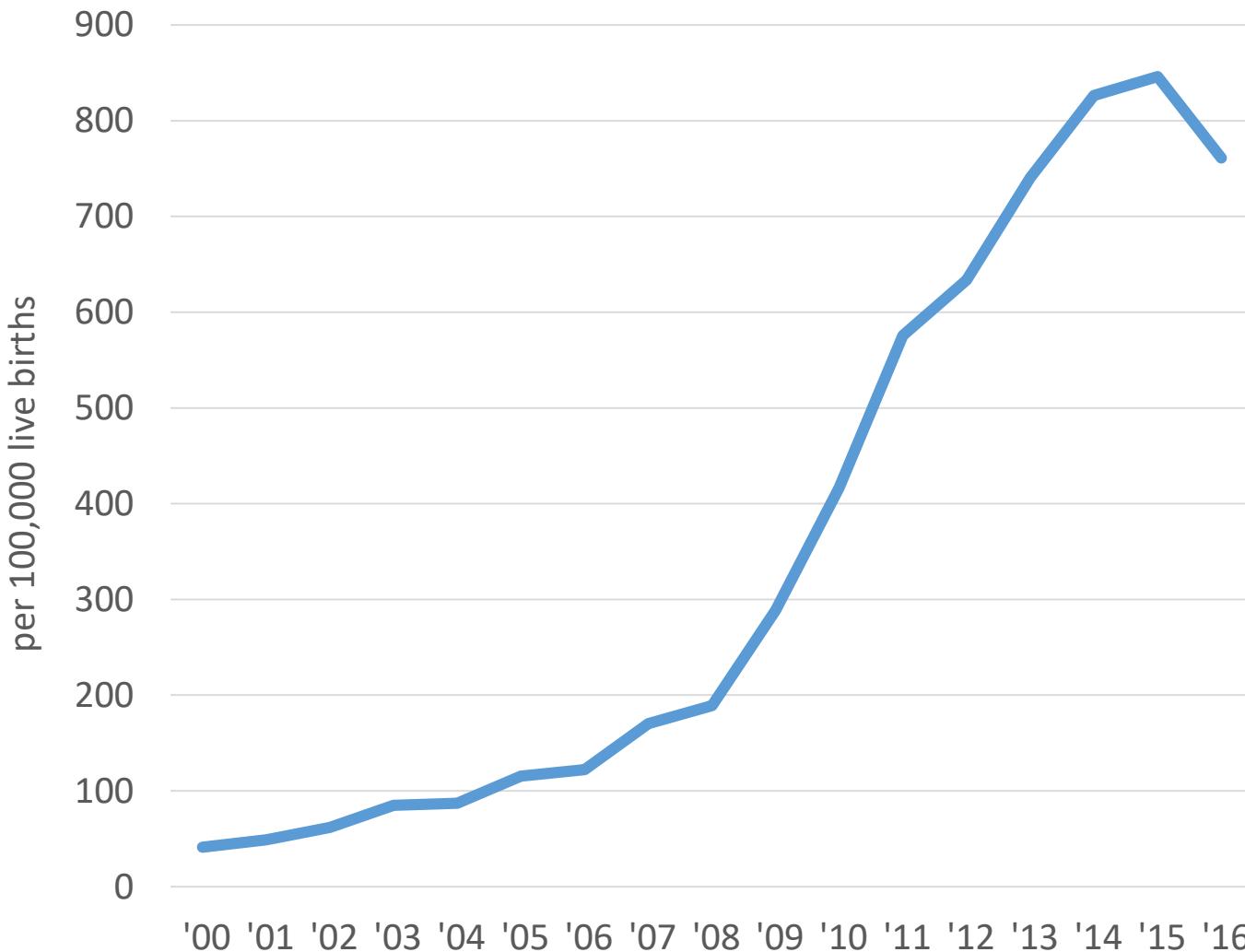


HIV:

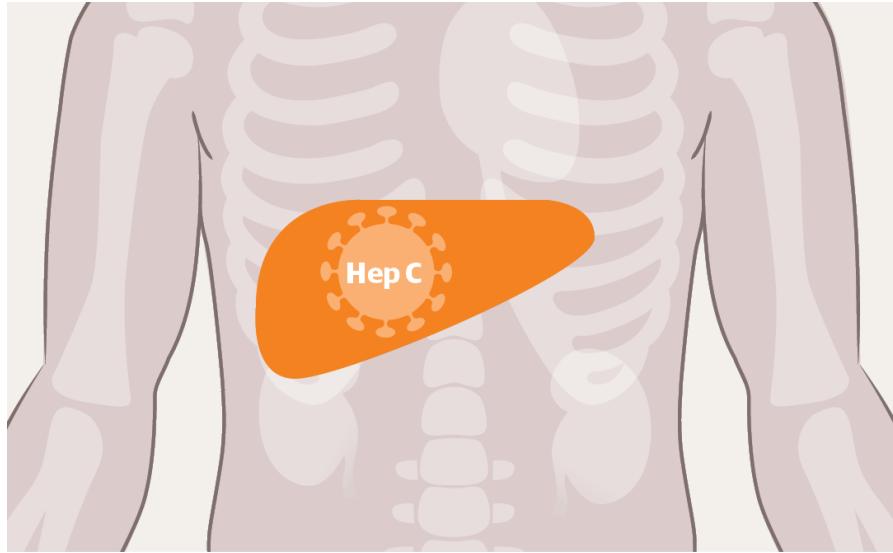


Neonatal Abstinence Syndrome

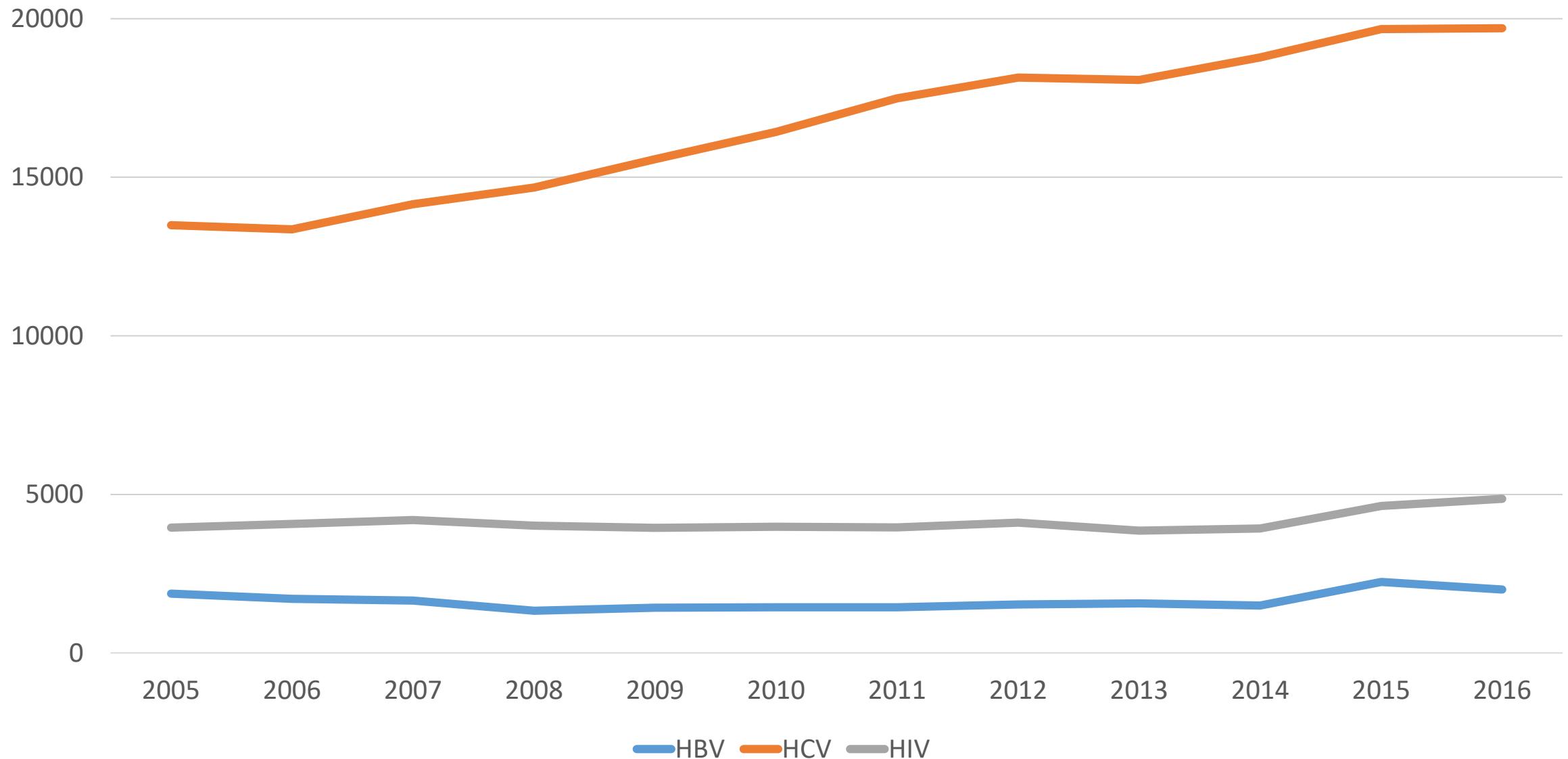
Rate of Treated Neonatal Abstinence Syndrome



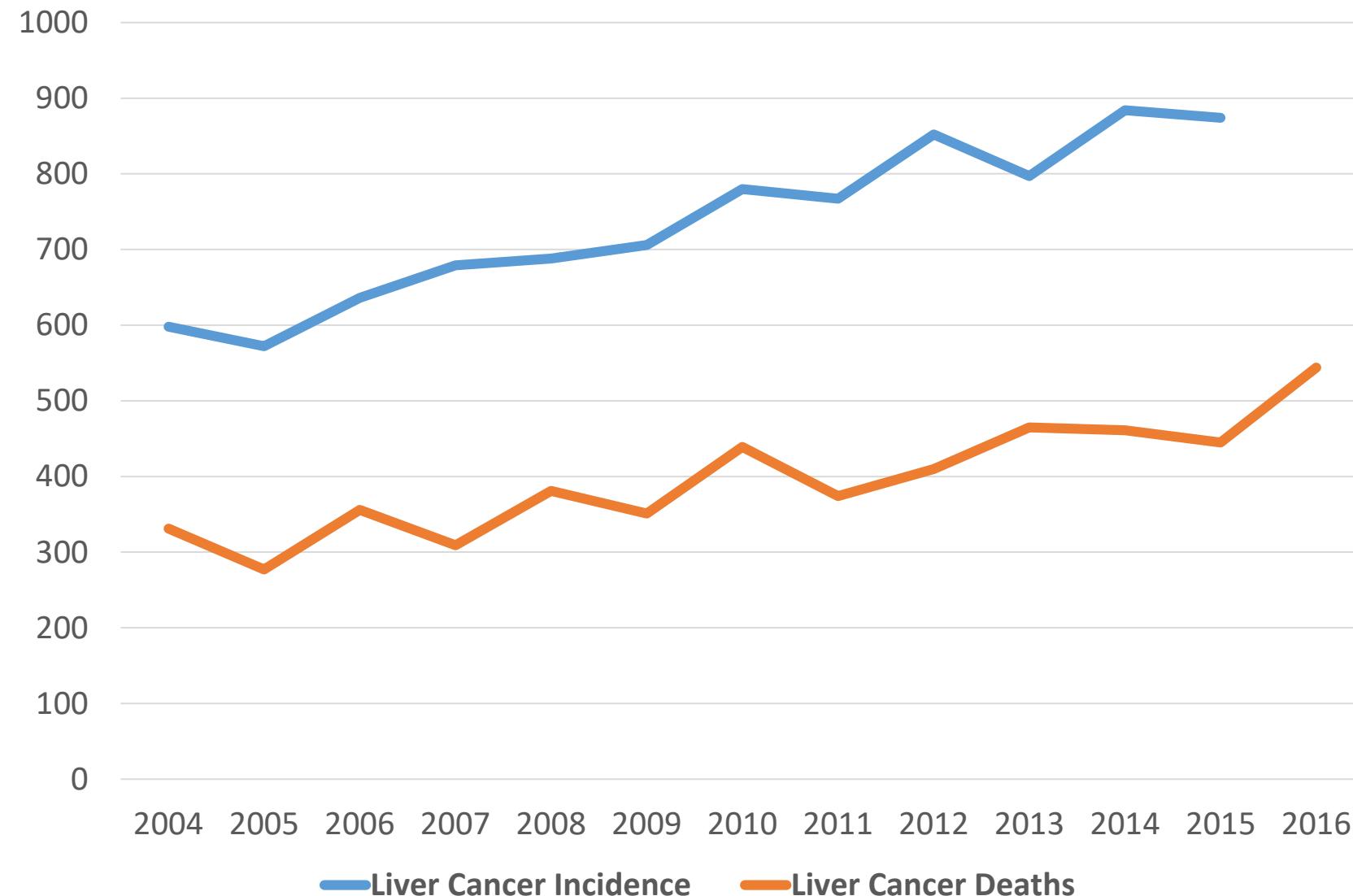
HCV Testing, Treatment, and Outcomes



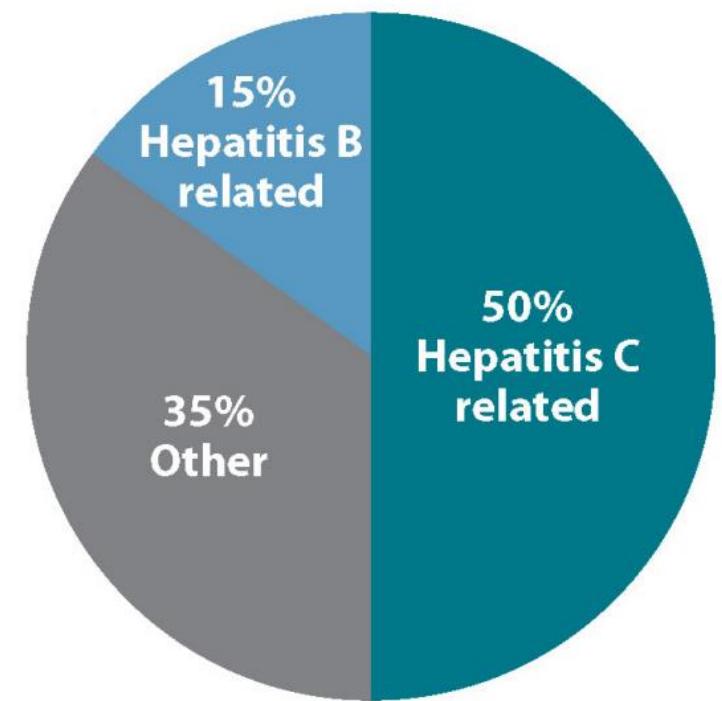
Hospitalizations



Liver Cancer Incidence and Death

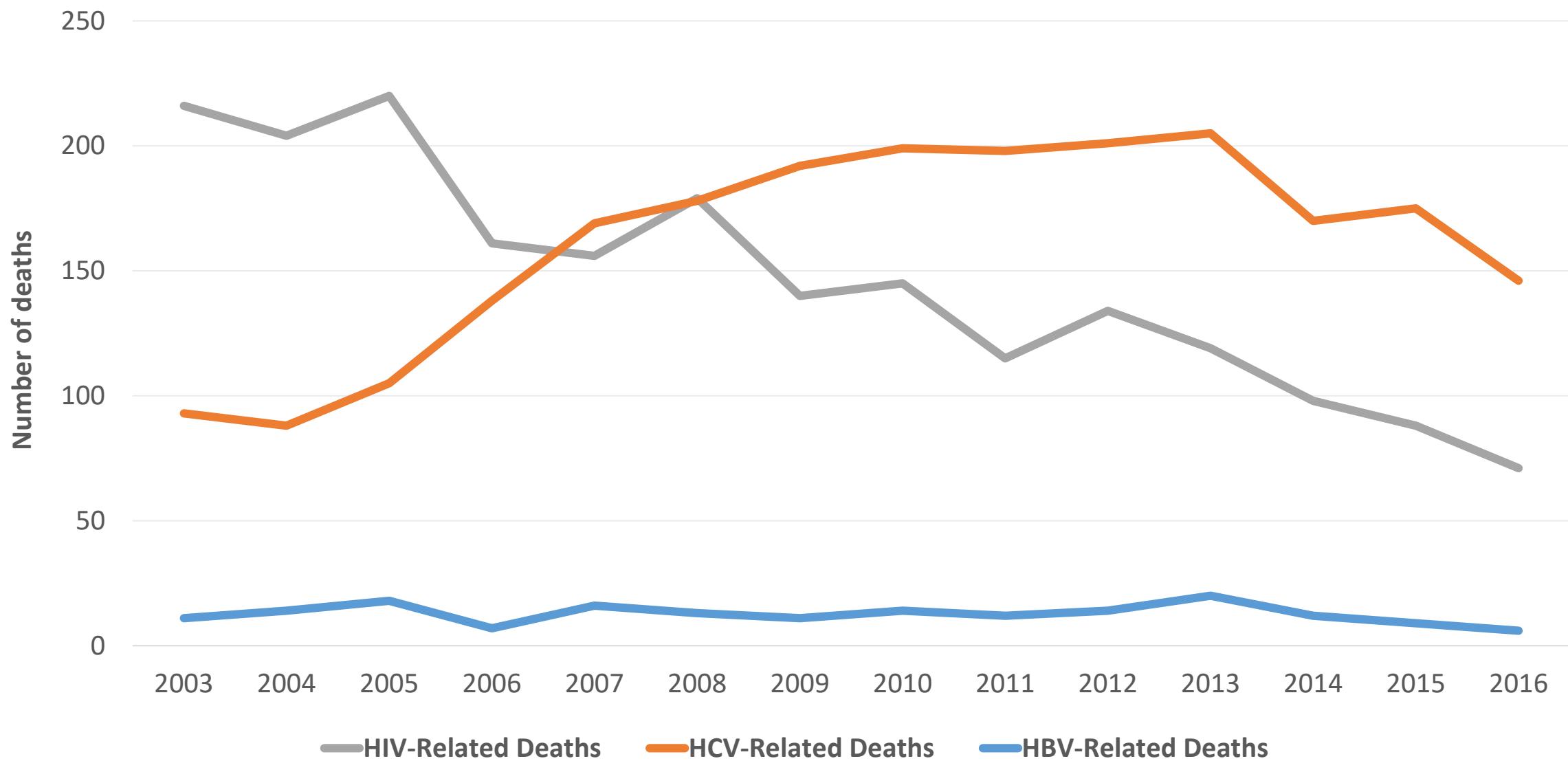


Factors Contributing to Liver Cancer Incidence in the U.S.

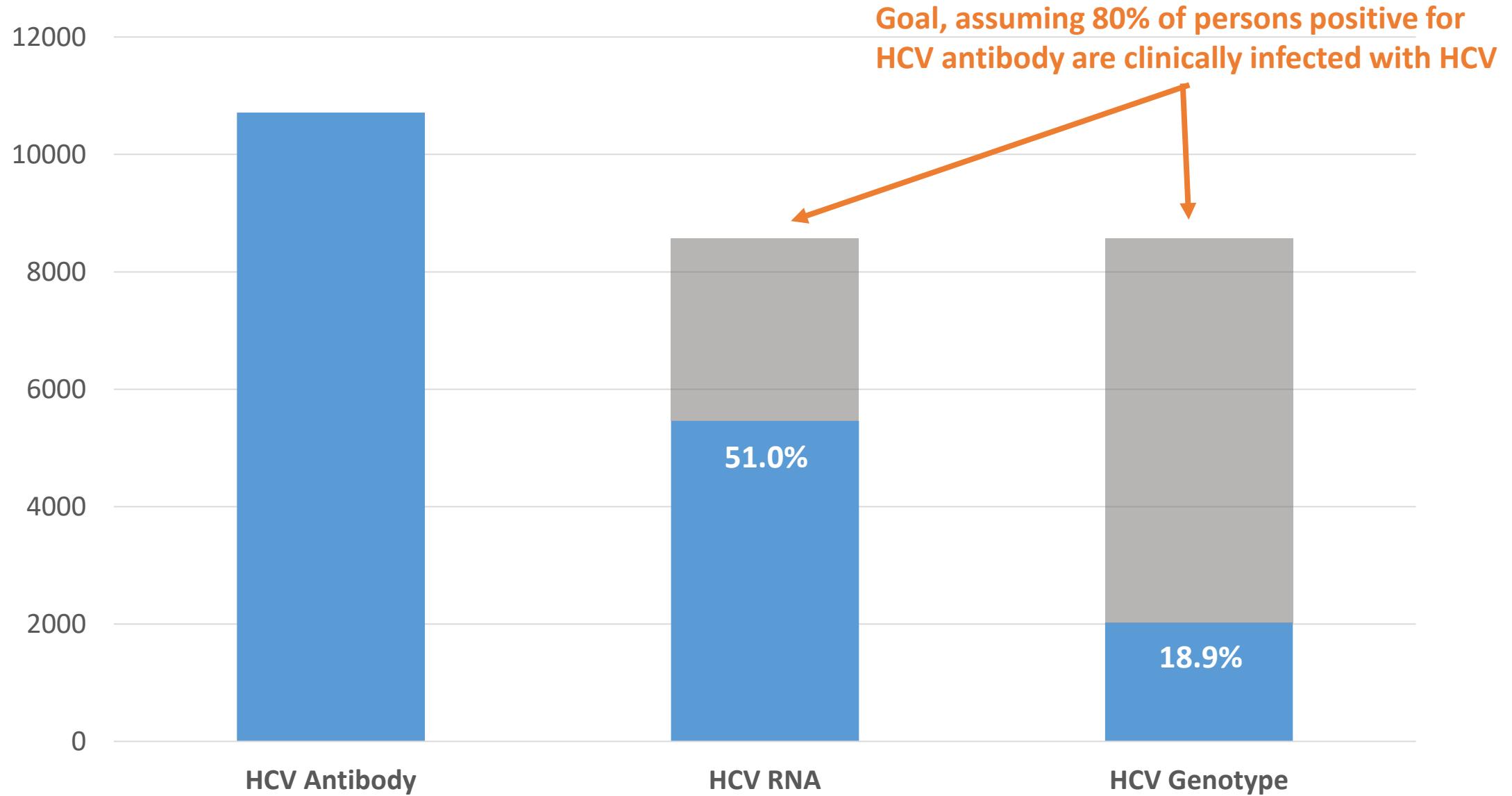


<https://www.cdc.gov/nchhstp/newsroom/docs/factsheets/viral-hep-liver-cancer.pdf>

Mortality

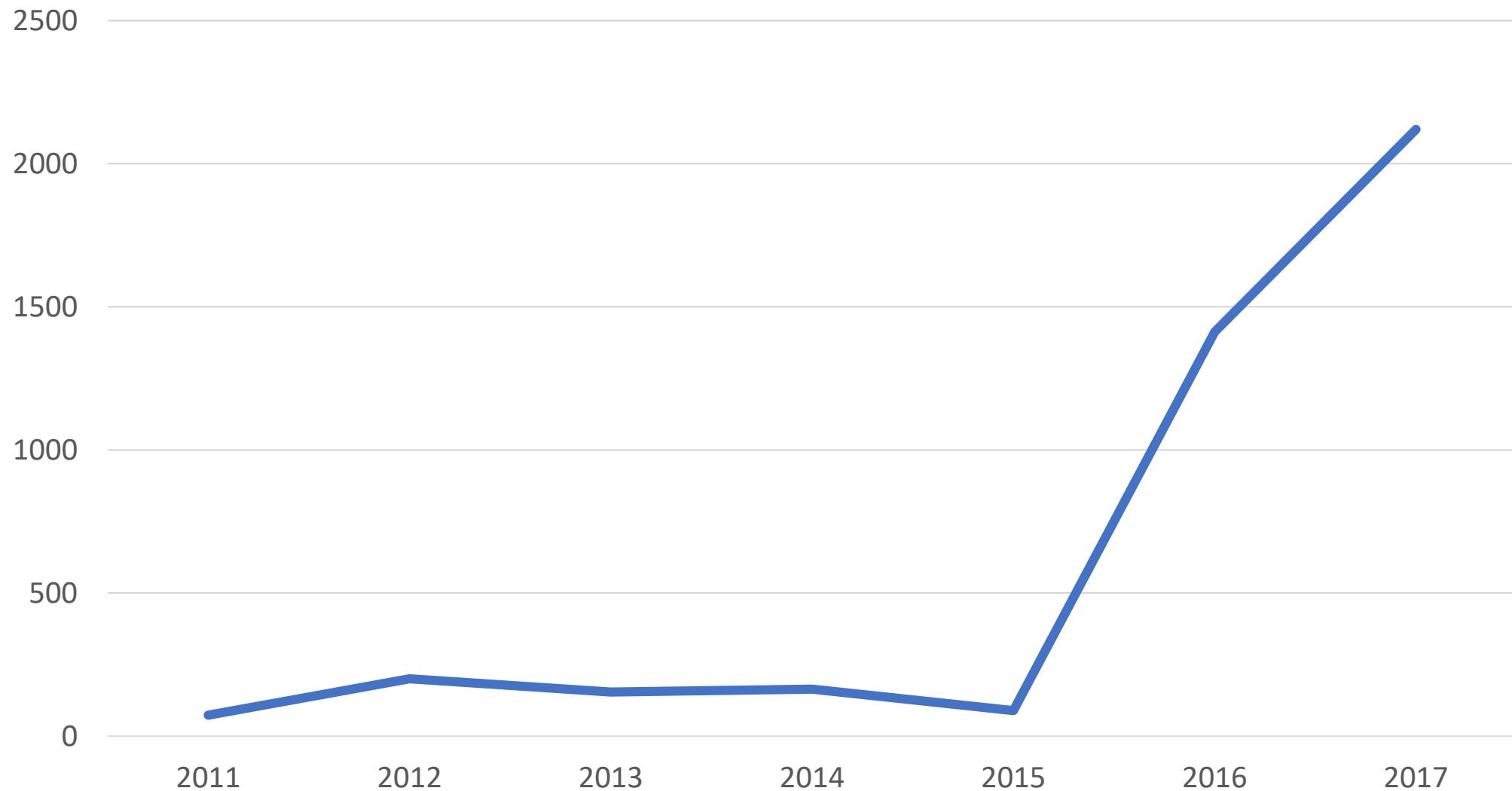


Hepatitis C Testing Cascade, 2017



Treatment

Number of Unique Michigan Medicaid Beneficiaries Receiving HCV Treatment



Thanks!

MDHHS-Hepatitis@Michigan.gov

517-335-8165

www.mi.gov/hepatitis

